

How Remote Assist and HoloLens 2 Support Virtual Gemba Walks

SphereGen Case Study Remote Assist

A global manufacturer with multiple plant locations uses Remote Assist to facilitate Gemba Walks, providing visual on-the-spot status updates for remote managers.

Microsoft Partner

OVERVIEW

Our Manufacturing client follows the principles of Gemba Kaizan and utilizes Gemba Walks on their shop floor to support continuous improvement. Gemba Walks are the act of walking production lines to assess processes for improvement. These improvements can range from safety to productivity or waste reduction.

Challenges

Support for Gemba Walks from remote locations relied on video calls via iPad or computer . These large devices were moved around manufacturing departments for each portion of the walkthrough. This process was cumbersome and reduced the participants' ability to observe and communicate effectively.

Our client wanted to make these walkthroughs more impactful. Their goals were to:

1. Increase the clarity of communication during remote Gemba Walks.
2. Improve the remote viewing quality of the Gemba Walk.
3. Raise the effectiveness of the remote walkthrough meetings building the basis for more informed decision-making regarding process improvements.

Solution

We worked with our client to implement Remote Assist services on the HoloLens 2. The manufacturer purchased (1-2) HoloLens headsets per factory, based on the size of the factory, so that communication, observation, and productivity were increased during the Gemba walkthrough meetings. By having a manager or supervisor wear a HoloLens 2, remote viewers could see a live first-person video feed of the factory floor. Participants could interact with the factory environment by drawing or annotating on the headset user's field of view. With object anchoring, these drawings can be placed within a specific area of the environment and will remain in place for the duration of the call, increasing clarity in communication and direction.

IMPACT

Enhanced Clarity of Communication



Better Informed Decision Making



More Effective Meetings – Increased Productivity



THE DETAILS

Our Client implemented Remote Assist with the HoloLens 2 to provide a more effective method of executing Gemba Walks. However, Remote Assist performs double duty as a means of remote troubleshooting maintenance issues as well.

APPROACH

Implementation/Training of Remote Assist

We worked with our client to configure their Teams environment to properly allow communications and collaboration for the HoloLens 2 and Remote Assist. Implementations were tested in each production facility to ensure audio could be heard above production noise and that network speed was sufficient for uninterrupted communication. All users were trained on the features of Remote Assist and how to troubleshoot any connection exceptions.

Remote Gemba Walks

After using the HoloLens 2 with Remote Assist to perform Gemba Walks, our client found that communications between remote participants and the shop floor were effectively improved. Remote participants could see exactly what the HoloLens user saw, and they could communicate verbally as well as with annotations on live equipment. Meeting discoveries were more impactful, improving productivity and engagement during meetings.

Remote Maintenance Support

Once our client was trained on the operation of Remote Assist for Gemba, they realized that this platform was also perfect for remote maintenance support. Subject Matter Experts (SMEs) no longer needed to travel to factory locations to provide specialized guidance and support. Relying on Remote Assist, our client was able to reduce equipment downtimes and travel costs, as production lines could be supported remotely.

Platform

- Microsoft Teams
- Remote Assist (RA)
- HoloLens 2 using Mixed Reality (MR)

Skills

- Azure
- HoloLens 2 & Remote Assist Support
- HoloLens 2 Implementation
- Remote Assist Implementation

CONCLUSION

By implementing Remote Assist on the HoloLens 2, our client was able to achieve their goals of accomplishing more effective virtual Gemba Walks. In addition, they realized the value of using the Remote Assist platform as a remote maintenance tool.

In summary, our client realized:

1. Improved clarity and understanding of operations viewed through the Remote Assist feed leading to better participant engagement
2. Increased productivity during the Gemba Walk meetings
3. Better informed decision making related to process adjustments
4. Decreased set up and down time during department walkthrough transitions, resulting in shorter meeting times
5. Ability to remotely support equipment maintenance
6. Cost savings due to less downtime and travel expenses

Remote Assist with the HoloLens 2 is a powerful tool for the Manufacturing industry in multiple capacities. If you are interested in learning more about this platform and using Mixed Reality (MR) in your organization, please contact us – we are an experienced Microsoft Mixed Reality Partner.

SphereGen is a unique solutions provider that specializes in cloud-based applications, custom web/mobile apps, RPA (Robotic Process Automation), and Extended Reality (AR/VR/MR). We offer full-stack custom application development to help customers employ innovative technology to solve business problems.